

PLG-RKT (Q-12): sc-167365

BACKGROUND

Cleavage of the serine proteinase plasminogen to form plasmin is the central event in the dissolution of blood clots by the fibrinolytic system. Within the fibrinolytic cascade, the serine proteinases urokinase-type plasminogen activator (uPA) and tissue-type plasminogen activator (tPA) activate the proenzyme plasminogen by cleaving plasminogen to form the fibrinolytically active enzyme plasmin. PLG-RKT (plasminogen receptor (KT)), also known as AD025, MDS030, C9orf46, PLGRKT or Plg-R(KT), is a 147 amino acid multi-pass membrane plasminogen receptor that colocalizes with uPAR to the cell surface. Expressed in peripheral blood cells, monocytes and in adrenal medulla, PLG-RKT may be involved in plasminogen-dependent regulation of macrophage invasion, chemotactic migration, and recruitment in the inflammatory response.

REFERENCES

1. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. *Nature* 429: 369-374.
2. Zheng, X., et al. 2006. Bcr and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. *BMC Cancer* 6: 262.
3. Coppo, P., et al. 2006. Bcr-Abl activates STAT3 via JAK and MEK pathways in human cells. *Br. J. Haematol.* 134: 171-179.
4. Hims, M.M., et al. 2007. A humanized IKBKAP transgenic mouse models a tissue-specific human splicing defect. *Genomics* 90: 389-396.
5. Burmeister, T., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. *Haematologica* 92: 1699-1702.
6. Fernandez-L, A., et al. 2007. Gene expression fingerprinting for human hereditary hemorrhagic telangiectasia. *Hum. Mol. Genet.* 16: 1515-1533.
7. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (rendu-osler disease). *Respiration* 74: 361-378.
8. Gardiner, J., et al. 2007. Potential role of tubulin acetylation and microtubule-based protein trafficking in familial dysautonomia. *Traffic* 8: 1145-1149.
9. Temtamy, S.A., et al. 2007. Phenotypic and cytogenetic spectrum of 9p trisomy. *Genet. Couns.* 18: 29-48.

CHROMOSOMAL LOCATION

Genetic locus: PLGRKT (human) mapping to 9p24.1; Plgrkt (mouse) mapping to 19 C1.

SOURCE

PLG-RKT (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PLG-RKT of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167365 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PLG-RKT (Q-12) is recommended for detection of PLG-RKT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PLG-RKT (Q-12) is also recommended for detection of PLG-RKT in additional species, including bovine.

Suitable for use as control antibody for PLG-RKT siRNA (h): sc-92576, PLG-RKT siRNA (m): sc-140341, PLG-RKT shRNA Plasmid (h): sc-92576-SH, PLG-RKT shRNA Plasmid (m): sc-140341-SH, PLG-RKT shRNA (h) Lentiviral Particles: sc-92576-V and PLG-RKT shRNA (m) Lentiviral Particles: sc-140341-V.

Molecular Weight of PLG-RKT: 17 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.